

ORIGINAL

OPEN MEETING



0000091461

MEMORANDUM
RECEIVED

2008 DEC -2 P 4: 11

Arizona Corporation Commission

DOCKETED

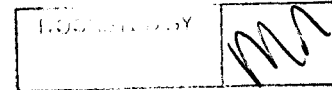
DEC 2 2008

TO: THE COMMISSION

FROM: Utilities Division

AZ CORP COMMISSION
DOCKET CONTROL

DATE: December 2, 2008



RE: ARIZONA PUBLIC SERVICE COMPANY APPLICATION FOR APPROVAL OF ITS DEMAND-SIDE MANAGEMENT PROGRAM PORTFOLIO PLAN UPDATE 2008-2010. (DOCKET NO. E-01345A-07-0712)

On December 31, 2007, Arizona Public Service Company ("APS" or "the Company") made a filing to update its Demand-Side Management ("DSM") Portfolio Plan ("Portfolio Plan") for 2008 through 2010. The Portfolio Plan and its various DSM programs were initially planned and budgeted for the time period 2005 through 2007. In its filing, APS requested approval of overall program spending of \$25.5 million per year (\$76.5 million for the three-year period). It also requested approval of program-specific budgets by budget category for the same three-year period. In its filing, APS also provided estimates of program energy saving and other benefits as well as requests for various portfolio enhancements and requests for clarification.

BACKGROUND

On July 1, 2005, APS filed an application for approval of its Portfolio Plan and related DSM programs. The Portfolio Plan includes various DSM programs that provide energy-efficiency opportunities for both Residential and Non-Residential program participants. The Portfolio Plan was filed in response to APS' DSM obligations provided for in Commission Decision No. 67744, April 7, 2005. APS filed revisions to its Portfolio Plan filing on November 14, 2005, and November 21, 2005.

The Commission initially acted on APS' proposed Portfolio Plan programs and activities in a series of decisions in 2005 and 2006. On August 17, 2005, the Commission approved the lighting portion of APS' Residential Consumer Products program in Decision No. 68064. On February 23, 2006, in Decision No. 68488, the Commission granted interim approval for six APS Non-Residential DSM programs and further ordered APS to refile the non-residential portion of its Portfolio Plan within 13 months, for final Commission approval. On April 12, 2006, the Commission approved two additional Residential programs in Decision No. 68648 and its Energy-Wise Low Income program in Decision No. 68647.

On March 26, 2007, APS made two similar but separate filings ("13-month filing") to fulfill obligations arising from earlier Commission Decisions relating to the Company's portfolio of Non-Residential and Residential demand-side management DSM programs and activities. The Company was required to provide the Commission with specific information reflecting 12

months of actual experience with its DSM programs and to make its filing(s) within 13 months of Decision No. 68488 issued on February 23, 2006.

During 2007, the Commission acted on various components of APS' 13-month filing. On August 28, 2007, the Commission rendered Decision No. 69879 in response to an additional APS application received on June 18, 2007, for expedited approval of certain time-sensitive initiatives contained in its 13-month filings. On December 4, 2007, the Commission rendered Decision No. 70033 in response to the residential components of the Company's 13-month filing. Staff docketed a Staff Report and Proposed Order on November 12, 2008, recommending approval for five of APS' six Non-Residential programs as well as a large number of changes and enhancements to improve the programs based on actual program experience and performance. At the time of this writing, the 13-Month Non-Residential DSM item (Docket No. E-01345A-05-0477) is awaiting an Open Meeting and Decision by the Commission.

PORTFOLIO PLAN RESULTS 2005 - 2007

Table 1 summarizes the electric demand (MW) and energy (MWh) savings resulting from Portfolio Plan operations over the period 2005 through 2007. The energy savings are "lifetime" savings (savings over the measure life) of the measures installed under the program during the three-year period 2005 through 2007.

Table 1

APS DSM Portfolio Plan Energy and Demand Savings (As Reported in Semi-Annual Progress Reports) (2005 – 2007)		
DSM Program	Energy Savings (MWh)	Demand Savings (MW)
Residential		
Energy-Wise Low Income	14,589	0.33
HVAC Replacement	260,365	7.12
New Construction	134,832	2.86
Consumer Products (CFL)	1,467,359	42.13
Total Residential	1,877,145	52.44

Non-Residential		
Large Existing	1,003,888	8.97
New Construction	257,424	1.68
Small Business	42,577	0.52
Building Operator Training	8,962	0.07
Energy Information Services	0	0.00
Schools	63,602	0.59
Total Non-Residential	1,376,453	11.83
Portfolio Plan Total	3,253,598	64.27

Table 2 summarizes additional measure lifetime savings resulting from APS' Portfolio Plan operations over the period 2005 through 2007.

Table 2

APS DSM Portfolio Plan Environmental Savings (2005 - 2007)					
DSM Program	Sulphur Oxide (SO _x)	Nitrogen Oxide (NO _x)	Carbon Dioxide (CO ₂)	Particulate Matter (PM ₁₀)	Water (H ₂ O)
	Lbs.	Lbs.	Million Lbs.	Lbs.	Million Gallons
Residential					
Energy-Wise Low Income	63	2,509	13.4	346	3.4
HVAC Replacement	1,120	44,783	238.8	6,171	60.7
New Construction	580	23,191	123.6	3,196	31.4
Consumer Products (CFL)	6,310	252,386	1,345.6	34,776	341.9
Total Residential	8,073	322,869	1,721.4	44,489	437.4
Non-Residential					
Large Existing	4,317	172,669	920.6	23,792	233.9
New Construction	1,107	44,277	236.1	6,101	60.0
Small Business	183	7,323	39.0	1,009	9.9
Building Operator Training	39	1,541	8.2	212	2.1
Energy Information Services	0	0	0	0	0
Schools	273	10,940	58.3	1,507	14.8
Total Non-Residential	5,919	236,750	1,262.2	32,621	320.7
Portfolio Plan Total	13,992	559,619	2,983.6	77,110	758.1

PORTFOLIO SPENDING 2005 – 2007

APS under-spent its budget for the period 2005 through 2007. The Company reported spending of just over \$33 million, roughly equivalent to the \$30 million amount it was authorized to collect from all customers in base rates over the same period. By spending at least \$30 million, APS avoided the requirement to “give back” any amount under \$30 million through a negative DSM adjustor rate. The amount of DSM spending under its original obligation of \$48 million for the three-year period (\$18 million) remains an APS obligation. APS has proposed fulfilling this remaining 2005 through 2007 obligation over the three years 2008 through 2010.

Table 3 is a summary of APS Portfolio Plan spending from 2005 through June 2008. The spending numbers have been aggregated from numbers reported in the Semi-Annual DSM Progress Reports submitted by APS to the Commission. The table includes a running 12-month spending column including the most current data available for the purpose of comparing historic 12-month spending to 12-month spending numbers proposed by APS for 2008 through 2010.

Table 3

APS DSM Portfolio Plan Total Spending (As Reported in Semi-Annual Progress Reports) 2005 - Current			
6-Month Reporting Period	6-Month Spending	Running 12-Month Spending	Cumulative Spending
January – June, 2005	\$953,501		
July – December, 2005	\$2,257,280	\$3,210,781	\$3,210,781
January – June, 2006	\$2,686,449	\$4,943,729	\$5,897,230
July – December, 2006	\$7,943,572	\$10,630,021	\$13,840,802
January – June, 2007	\$6,833,297	\$14,776,869	\$20,674,099
July – December, 2007	\$12,566,713	\$19,400,010	\$33,240,812*
January – June, 2008	\$11,627,390	\$24,194,103	\$44,868,202
Note: Spending reported includes Measurement, Evaluation & Research expenses and Performance Incentive.			
* A slightly different 2005 – 2007 DSM spending number of \$33,237,361 was reported to the Commission by APS in its Demand Side Management Adjustor Clause (“DSMAC”) filing. APS attributes the difference to its handling of some customer credits associated with the EIS program which were included in the Semi-Annual DSM Progress Reports but did not get booked into the accounting system. APS is attempting to reconcile the discrepancy.			

Staff has made some observations based on the data. For example, dividing the 2005 through 2007 cumulative spending presented in Table 3 (\$33,240,812) by the 2005 through 2007 MWh savings presented in Table 1 (3,253,598 MWh) results in a cost of \$10.22 per MWh or 1.02 cents per kWh. Staff believes these overall results are favorable and that energy-efficiency in this instance appears to be an economical “source” of electric energy. Similarly, dividing the 2005 through 2007 cumulative spending presented in Table 3 (\$33,240,812) by the 2005 through

2007 MW savings presented in Table 1 (64.27 MW) results in a cost of \$517,206 per MW. This capacity cost is about 75 percent higher than conventional and advanced gas combustion turbine technologies, but is considerably lower than most other generation options.

PROPOSED SPENDING AND BUDGET LEVELS 2008 - 2010

APS has proposed a budget that is consistent with its spending obligations established in the Settlement Agreement in Decision No. 67744, April 7, 2005, ("Settlement Agreement") and with expanded obligations created in Decision No 69879, August 28, 2007. Under Decision No. 67744, APS is obligated to spend at least \$16 million per year on Commission-approved DSM programs. Included in the \$16 million annual spending obligation is a \$10 million annual base rate DSM allowance for the costs of approved eligible DSM-related items and an obligation to spend on average at least an additional \$6 million annually on approved eligible DSM-related items to be recovered by means of the Company's DSM adjustment mechanism. Under Decision No. 69879, APS is obligated to spend an additional \$3.5 million annually for Rebates and Incentives for its Non-Residential Existing DSM program.

APS is proposing an average annual Portfolio Plan budget of \$25.5 million per year for the period 2008 through 2010. The proposed Portfolio plan annual budget total was derived by adding the spending obligation components shown in Table 4 below.

Table 4

APS DSM Portfolio Plan Annual Spending Obligation Components (Annual Spending for Period 2008-2010)	
Decision No. 67744, April 7, 2005 in Base Rates	\$ 10 million per year
Decision No. 67744, April 7, 2005 in DSM Adjustor Rate	\$ 6 million per year
Decision No. 69879, August 28, 2007 for NR Existing	\$ 3.5 million per year
Average Annual Under Spending for 2005 – 2007 (Make-up)	\$ 6 million per year
Total	\$25.5 million per year

It should be noted that APS' proposed Portfolio Plan budget for 2008 through 2010 is a top-down budget, based on allocation of this \$25.5 million annual spending obligation to the various DSM programs, activities, and budget categories. It should also be noted that APS has proposed an "average annual" budget for each of the three years 2008 through 2010, meaning that each budget for each of the three years is the same. Staff believes that most of the ramp-up of APS DSM activities has been accomplished, but expects to see additional growth over the period 2008 through 2010 as evidenced by the higher budget numbers.

Staff is not overly concerned with the flat three-year budget, but believes that APS' DSM Portfolio Plan spending obligations are for each year, not for a three-year budgeting period. APS' Portfolio Plan spending obligations arising from the Settlement Agreement and other Commission Decisions are ongoing obligations that continue until changed or terminated by the Commission. Such obligations do not expire or terminate at the end of any three-year budgeting

period. In fact, the three-year budgeting period is merely a somewhat arbitrary grouping of years that has little significance other than as a convenient planning horizon.

Staff has reviewed the budget allocations to the various programs and to the various budget categories within each program and finds them to be reasonable. Staff believes that the level of the 2008 \$25.5 million Portfolio Plan proposed budget may be somewhat conservative considering that annual spending for the "running 12 months spending" ended June 30, 2008, was \$24.2 million as shown in Table 3. Staff believes, however, that the \$25.5 million is an annual spending guideline and that APS may apply to spend over that amount on prudently incurred Commission-approved DSM activities should the demand for DSM program participation create the need to do so. APS should ensure that any such additional spending requested remains within other specific budget caps and constraints placed on it by the Commission.

PORTFOLIO PLAN GOALS

APS states that its goals for the Portfolio Plan during 2008 through 2010 include DSM spending of \$76.5 million (\$25.5 million per year), lifetime MWh energy savings of 6,814,000 MWh, demand savings of 109.9 MW, and net benefits of \$187 million.

Staff believes these goals are attainable and that the demand savings estimated by APS may be somewhat conservative. Staff also believes that additional environmental benefits to society will accrue from this level of DSM activities. Staff estimates the benefits from measures installed over this three-year period to be a savings of 1) 29,300 lbs. of sulphur oxide (SO_x), 2) 1,172,008 lbs. of nitrogen oxide (NO_x), 3) 6,248.4 million lbs. of carbon dioxide (CO₂), 4) 161,492 lbs. of particulate matter (PM₁₀), and 5) 1,587.7 million gallons of water (H₂O).

DSM PROGRAMS AND ACTIVITIES

APS is proposing the continuation of its portfolio of Residential programs and Non-Residential programs ("NR programs") but with some modifications. The Company is not proposing the addition of any new DSM programs, nor is it proposing the discontinuation of any of its existing DSM programs. It is proposing certain procedural changes and modifications to some of its programs as well as a stepped-up level of spending and participation.

Residential Programs

APS' portfolio of ongoing Residential programs is described in the Company's application and are composed of the following:

1. Residential New Construction ("Residential New")
2. Residential Existing Heating, Ventilation, and Air Conditioning ("Residential HVAC")

3. Residential Consumer Products
4. Residential Energy Wise Low Income ("Energy Wise")

Non-Residential Programs

APS' portfolio of ongoing NR programs is described in the Company's application and are composed of the following:

1. Schools
2. Non-Residential Existing Facilities ("NR Existing")
3. Non-Residential New Construction and Major Renovation ("NR New")
4. Small Non-Residential ("NR Small")
5. Non-Residential Building Operator Training ("NR BOT")
6. Non-Residential Energy Information Services ("NR EIS")

APS PROPOSED PORTFOLIO PLAN FLEXIBILITY CHANGES

Allow APS to Shift up to 50 Percent of Funding Between Programs

APS has requested a change to allow the Company to shift up to 50 percent of funding between programs within a sector, such as Residential or Non-Residential. Current restrictions on budget flexibility limit budget shifting to a maximum of 25 percent of budgeted funds from one program to another program in the same sector per calendar year. This restriction is in effect for budget shifting among all NR programs and for budget shifting among the Residential New program, the Residential HVAC program, and the Residential Consumer Products program. These restrictions were ordered in Commission Decision No. 68488, February 23, 2006, for NR programs and in Decision No. 68648, April 12, 2006, for Residential programs.

Staff performed a thorough analysis of budget flexibility in its review of APS' NR programs as discussed on page 38 of Attachment A to Decision No. 68488. This analysis resulted in Staff recommendations to allow APS to shift a maximum of 25 percent of budgeted funds from one program to another program in the same sector per calendar year, and the Commission subsequently issued Orders adopting Staff's recommendations.

Staff is not aware of any situation where this policy has been a problem for APS. APS has, in fact, made use of its ability to shift funds from one program to another program in the same sector multiple times. In addition, on June 18, 2007, the Company filed an application requesting additional Rebate and Incentive dollars for its NR Existing program. In Decision No. 69879, the Commission approved an additional \$3.5 million annually for the NR Existing program Rebates and Incentives budget category. It appears to Staff that the 25 percent shifting authority is sufficient for routine cases, and the Company has the ability to file an application with the Commission to handle extraordinary cases. Staff believes that the procedure is working

precisely as it was intended to work, and that the Commission should retain oversight in the extraordinary cases so that it can monitor and provide valuable input in such cases.

Staff does not believe that APS has made a convincing case for increasing the percentage of funds that can be shifted from one program to another in the same sector. Furthermore, by shifting 25 percent one year and 25 percent the following year, APS has the ability to shift 50 percent of the funds from a program in two years; or 75 percent in three years; or 100 percent in four years. For the reasons discussed above, Staff recommends the Commission deny approval for APS to increase budget shifting limitations from a maximum of 25 percent of budgeted funds from one DSM program to another DSM program in the same sector per calendar year.

Allow APS to Set Financial Incentives Up to 100 Percent of Incremental Cost

APS has requested a change to allow the Company to modify DSM financial incentive payments to program participants up to 100 percent of incremental cost. Current restrictions on budget flexibility limit incentives to a maximum of 75 percent of incremental cost, and for certain measures, 50 percent of incremental cost. These restrictions are in effect for limiting incentive levels for all NR programs and for the Residential New program, and the Residential HVAC program. These restrictions were ordered by the Commission in Decision No. 68488, February 23, 2006, for NR programs and in Decision No. 68648, April 12, 2006, for the above mentioned Residential programs.

Again, these restrictions were recommended by Staff after a thorough analysis of budget flexibility in its review of the NR programs as discussed on page 38 of Attachment A to Decision No. 68488. The Commission subsequently issued Orders adopting Staff's recommendations.

Staff does not believe that APS has made a convincing case for blanket authority to modify incentives to as much as 100 percent of incremental cost. The only example offered by APS, where a higher incentive was cited as a possible solution to low participation, is the case of the NR Small program where the company is having difficulties reaching small business with its DSM programs. In the 13-Month NR DSM item (Docket No. E-01345A-05-0477), Staff has recommended the adoption of the Direct Install concept for the NR Small and Schools programs including a parallel recommendation for allowing financial incentive payments of up to 90 percent of incremental cost for Direct Install measures only. At the date of this writing, the initiative to adopt Direct Install and to increase the maximum incentive percentage of incremental cost for Direct Install measures only has not been acted upon by the Commission.

Staff believes that 1) because APS has not made a convincing case for blanket authority to change financial incentive payments to 100 percent of incremental cost; 2) because the only example cited in support of a need for such a change was in connection with the Direct Install initiative for small business; and 3) because the Direct Install issue along with the related increase in the incentive cap to 90 percent of incremental cost is being dealt with in another docket; Staff recommends the Commission deny blanket authority for APS to increase the cap on

financial incentive payments without specific Commission approval, from current limits of 50 percent or 75 percent of incremental cost.

Allow APS to Change Minimum Efficiency Requirements to Qualify for an Incentive

APS has requested a modification to current policy that would allow the Company flexibility to change measure minimum efficiency requirements to qualify for an incentive without Commission approval. The Company cited the example of SEER and EER requirements on air-conditioner and heat pump replacement programs as an example. The Company states that many of its DSM program incentives are for equipment or services that are at the leading edge of energy-efficiency technology and practice. APS further states that the nature of such products and services is that they change relatively quickly. APS states that having flexibility to make such requirement changes without formal Commission approval would allow APS to minimize the lost opportunities that these types of issues present.

The Company also acknowledged that if given authority for any of the three requested flexibility changes, there should be certain parameters that guide its flexibility provisions. The parameters APS listed are 1) prior notification is provided to the Commission and to the DSM Collaborative members, 2) cost-effectiveness is maintained as proven by APS Total Resource Cost ("TRC") test results above 1.0, 3) the program's intent is not materially altered, 4) funding is not shifted between Residential and Non-Residential sectors or out of Low Income or Schools programs, and 5) funding shifts would not cause Planning and Administration costs to exceed the caps set in Commission Orders which approved the programs.

One issue with APS' request for flexibility to change measure minimum efficiency requirements without Commission approval lies in the cost-effectiveness issue outlined by APS in 2) above. Staff appreciates that APS would ensure cost-effectiveness by applying its TRC test, but Staff is also required to establish cost-effectiveness for measures utilized in APS' DSM programs. The Commission's 1991 Resource Planning Decision established the Societal Cost Test as the methodology to be used by Staff for determining the cost-effectiveness of a DSM program. Because different variables may be used by APS compared to those used by Staff, the results of Staff's analysis could be, and often are, different from the results obtained by APS.

If the flexibility requested by APS to change measure minimum efficiency requirements were to be adopted, Staff would not be afforded the opportunity to fulfill its obligation to review measure cost-effectiveness before new efficiency requirements were placed into service. This would be inconsistent with the Commission's 1991 Resource Planning Decision. Under current procedures, APS must make an application to the Commission to change efficiency requirements which affords Staff an opportunity to review the application and to perform necessary cost-effectiveness tests.

Staff does not believe that APS has made a convincing case for the Commission to grant it flexibility to change measure minimum efficiency requirements without Commission approval. Staff is also not aware of any situation where the current policy has been a problem for APS.

APS has, in fact, filed an application to change Residential HVAC program minimum EER requirements, and requested the application be processed in an expedited manner. This application was processed in a reasonable time by the Commission and certain problematic EER requirements were changed. Using this procedure, Staff was able to perform its analysis, including the Societal Cost Test on the measures, and APS was able to make needed adjustments to its measures within a reasonable time.

Based on the discussion above, Staff recommends the Commission deny APS the authority to change measure minimum efficiency requirements for DSM program participants to qualify for an incentive without first obtaining Commission approval.

APS REQUESTS FOR CLARIFICATION

APS is requesting clarification on two issues. First, the Company is requesting the Commission confirm that the provision that Rebates and Incentives for the NR programs from 2005 through 2007 be capped at the current estimated level of 52 percent of the overall budget expires at the end of 2007.

Secondly, the Company is requesting clarification that it can shift funding between measures in the same program without notification to the Commission or approval from the Commission.

Both issues were analyzed by Staff in the 13-Month NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and Decision by the Commission. In the Staff Report docketed on November 12, 2008, Staff has made recommendations regarding both of these issues as they relate to NR programs.

Recommendation (3) on page 63 of that Staff Report states "Staff recommends that the existing 52 percent limitation on combined Rebates and Incentives as a percentage of overall non-residential spending in all existing Non-Residential programs be removed beginning in the 2008 budget year."

Recommendation (9) on page 64 of that Staff Report states "Staff recommends that APS be granted the authority to shift budgeted funds within a Commission-approved DSM program, without obtaining Commission approval, either between budget categories within a DSM program or between sub-programs, measures or measure groups within a DSM program; unless such funding shifts would violate another budget-shifting parameter or limitation on budget flexibility ordered by the Commission."

Staff believes that a Commission decision on Recommendation 3 in the 13-Month NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and Decision by the Commission will respond to APS' request for clarification because the 52 percent restriction is in effect only for NR programs.

Staff believes that a Commission Decision on Recommendation (9) in the 13-Month NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and Decision by the Commission will respond to APS' request for clarification for budget shifting within its NR programs. Staff believes APS could require further clarification regarding applicability of this to its Residential DSM programs. For this reason, Staff recommends that APS be granted the authority to shift budgeted funds within any Commission-approved Residential DSM program, with the exception of the Energy-Wise Low Income Program, without obtaining Commission approval; either between budget categories within a DSM program or between sub-programs, measures, or measure groups within a DSM program; unless such funding shifts would violate another budget-shifting parameter or limitation on budget flexibility ordered by the Commission.

In order to achieve additional consistency between Residential and NR Portfolio Plan programs, Staff is offering further recommendations to extend some additional DSM program provisions recommended in the 13-Month NR DSM item (Docket No. E-01345A-05-0477) to the Residential DSM programs.

Staff recommends Planning and Administration costs for any given Residential program, with the exception of the Energy-Wise Low Income Program, not exceed 10 percent of the total program budget for the budgeting period, such as 2005 through 2007 or 2008 through 2010.

Staff recommends APS modify its Residential DSM Semi-Annual Progress Report sections to incorporate changes parallel to changes (if any) that may be approved by the Commission in the 13-Month Non-Residential DSM item (Docket No. E-01345A-05-0477) for Non-Residential DSM Semi-Annual Progress Report sections.

STAFF COST-EFFECTIVENESS ANALYSIS

As mentioned earlier, the Commission's 1991 Resource Planning Decision established the Societal Cost Test as the methodology to be used for determining the cost-effectiveness of a DSM program. Under the Societal Cost Test, in order to be cost-effective, the ratio of benefits to costs must be greater than one. That is, the incremental benefits to society of a program must exceed the incremental costs of having the program in place. Societal costs for a DSM program include the cost of the measure and the cost of implementing the program, excluding rebates. The societal benefits of a program include deferred or avoided generation capacity and energy costs. Other benefits of a program may include reduced water consumption and air emissions, although these benefits may not be monetized.

In its research in connection with the 13-Month NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and Decision by the Commission, Staff very recently performed its own cost-effectiveness studies on all APS existing and proposed new NR DSM measures using the Societal Cost Test. In its analysis of this Portfolio Plan filing, Staff performed its cost-effectiveness studies on all APS residential DSM measures.

Any measure demonstrating benefits exceeding its costs has a benefit/cost ratio of 1.0 or greater, and is considered to be cost-effective. Measures scoring slightly under 1.0 may be considered cost-effective based on the value of environmental benefits which are quantified but not assigned a dollar value and not reflected in the Societal Cost Test score.

All residential measures tested by Staff were found to be cost-effective with the exception of the Residential HVAC program air-conditioning and heat pump replacement measures. All five air-conditioner measures (SEER 14 through 18) and all five heat pump measures (SEER 14 through 18) scored less than 0.60 on Staff's Societal Cost Tests. In its analysis, Staff, for the first time, used energy (kWh) and peak demand (kW) savings numbers actually measured in the field by APS' Measurement, Evaluation, and Research ("MER") Contractor. These numbers were substantially lower than the "engineering" estimates used when the Residential HVAC program was approved on April 12, 2006, in Decision No. 68648. Additionally, the minimum efficiency standard from which savings are measured has changed from 11 SEER to 13 SEER since cost-effectiveness was last evaluated for this program. Thus, the savings measured from a base unit of 13 SEER to one of the energy-efficient SEER levels is considerably less than it would have been if measured from a base of 11 SEER.

Staff is very concerned about the Residential HVAC air-conditioner and heat pump cost-effectiveness results. Staff was told by APS that it also experienced unsatisfactory results when it performed its Total Resource Cost ("TRC") tests for cost-effectiveness. Staff was made aware of the issue at approximately the same time that APS sent its APS' Measurement, Evaluation, & Research Final Report, dated September 30, 2008, and docketed on October 27, 2008.

Staff has discussed the situation at length with APS, and it was discussed in the APS DSM Collaborative meeting on November 5, 2008, by participants from a variety of different perspectives. A number of potential solutions have emerged from the discussion including bundling the HVAC unit replacement measures with the quality install measure and possibly with the repair and replace measure, both of which passed Staff's Societal Cost Test. APS is currently evaluating Residential HVAC program modifications that would potentially return the program to cost-effectiveness.

Staff believes that the continuation of a DSM program found to be less than cost-effective is a serious problem that needs to be dealt with promptly. However, Staff also believes that APS and other involved parties need to proceed carefully to either make real procedural modifications to the program that will make it cost-effective or to terminate or replace the program as soon as possible. Staff recommends that APS file a plan in Docket Control by January 16, 2009, to 1) promptly implement modifications to the Residential HVAC program that will return the program to cost-effectiveness, or 2) promptly replace the program with an alternate DSM program to benefit Residential customers using funds allocated to the Residential HVAC program, or 3) terminate the program as promptly as possible.

ENERGY WISE LOW INCOME PROGRAM ISSUES

In its application, APS requested an increase in start-up costs for the Tribal Low Income Weatherization component of the Energy Wise program from 20 percent to 30 percent of total program costs. APS subsequently requested that Staff dismiss that request when neither party could determine the basis of the 20 percent limitation.

In its investigation of the issue, however, Staff became concerned whether APS and its program delivery Community Action Agency ("CAA") partners are operating the Energy Wise Low Income program in strict adherence to procedures established in Decision No. 68647, April 12, 2006. Staff believes that there could be some misunderstandings among the parties involved with the delivery of services under this program, and believes it may be beneficial to simply review operational procedures and expectations with APS to ensure that the Company is in conformance with the Order.

Staff does not believe that its concerns about the Energy Wise program should further delay Commission action on approval of APS' Portfolio Plan update. However, for the reasons discussed above, Staff recommends APS conduct a thorough review of the requirements of Decision No. 68647, and its Energy Wise Low Income program operations, and schedule a presentation to Staff no later than January 30, 2009, during which APS and Staff can discuss if the Company is in strict adherence with the Order, and if not, establish corrective actions necessary to bring the Company into strict adherence to the Order.

STAFF PORTFOLIO PLAN UPDATE RECOMMENDATION

Staff recommends that APS' Demand-Side Management Portfolio Plan Update 2008 through 2010 be approved with the modifications, additions, and requirements recommended herein.



Ernest G. Johnson
Director
Utilities Division

EGJ:JDA:lmJFW

ORIGINATOR: Jerry D. Anderson

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

2
3
4
5
6

8
9
0
1

DECISION NO. _____

ORDER

4
5

6

7

18
19

20
21
22
23
24
25
26
27

28

BACKGROUND

3. On July 1, 2005, APS filed an application for approval of its Portfolio Plan and related DSM programs. The Portfolio Plan includes various DSM programs that provide energy-efficiency opportunities for both Residential and Non-Residential program participants. The Portfolio Plan was filed in response to APS' DSM obligations provided for in Commission Decision No. 67744, April 7, 2005. APS filed revisions to its Portfolio Plan filing on November 14, 2005, and November 21, 2005.

4. The Commission initially acted on APS' proposed Portfolio Plan programs and activities in a series of decisions in 2005 and 2006. On August 17, 2005, the Commission approved the lighting portion of APS' Residential Consumer Products program in Decision No. 68064. On February 23, 2006, in Decision No. 68488, the Commission granted interim approval for six APS Non-Residential DSM programs and further ordered APS to refile the non-residential portion of its Portfolio Plan within 13 months, for final Commission approval. On April 12, 2006, the Commission approved two additional Residential programs in Decision No. 68648 and its Energy-Wise Low Income program in Decision No. 68647.

5. On March 26, 2007, APS made two similar but separate filings ("13-month filing") to fulfill obligations arising from earlier Commission Decisions relating to the Company's portfolio of Non-Residential and Residential demand-side management DSM programs and activities. The Company was required to provide the Commission with specific information reflecting 12 months of actual experience with its DSM programs and to make its filing(s) within 13 months of Decision No. 68488 issued on February 23, 2006.

6. During 2007, the Commission acted on various components of APS' 13-month filing. On August 28, 2007, the Commission rendered Decision No. 69879 in response to an additional APS application received on June 18, 2007, for expedited approval of certain time-sensitive initiatives contained in its 13-month filings. On December 4, 2007, the Commission rendered Decision No. 70033 in response to the residential components of the Company's 13-month filing. Staff docketed a Staff Report and Proposed Order on November 12, 2008, recommending approval for five of APS' six Non-Residential programs as well as a large number

of changes and enhancements to improve the programs based on actual program experience and performance. At the time of this writing, the 13-Month Non-Residential DSM item (Docket No. E-01345A-05-0477) is awaiting an Open Meeting and Decision by the Commission.

PORTFOLIO PLAN RESULTS 2005 - 2007

7. Table 1 summarizes the electric demand (MW) and energy (MWh) savings resulting from Portfolio Plan operations over the period 2005 through 2007. The energy savings are "lifetime" savings (savings over the measure life) of the measures installed under the program during the three-year period 2005 through 2007.

Table 1

APS DSM Portfolio Plan Energy and Demand Savings (As Reported in Semi-Annual Progress Reports) (2005 – 2007)		
DSM Program	Energy Savings (MWh)	Demand Savings (MW)
Residential		
Energy-Wise Low Income	14,589	0.33
HVAC Replacement	260,365	7.12
New Construction	134,832	2.86
Consumer Products (CFL)	1,467,359	42.13
Total Residential	1,877,145	52.44
Non-Residential		
Large Existing	1,003,888	8.97
New Construction	257,424	1.68
Small Business	42,577	0.52
Building Operator Training	8,962	0.07
Energy Information Services	0	0.00
Schools	63,602	0.59
Total Non-Residential	1,376,453	11.83
Portfolio Plan Total	3,253,598	64.27

8. Table 2 summarizes additional measure lifetime savings resulting from APS' Portfolio Plan operations over the period 2005 through 2007.

...

...

...

Table 2

APS DSM Portfolio Plan Environmental Savings (2005 – 2007)					
DSM Program	Sulphur Oxide (SO _x)	Nitrogen Oxide (NO _x)	Carbon Dioxide (CO ₂)	Particulate Matter (PM ₁₀)	Water (H ₂ O)
	Lbs.	Lbs.	Million Lbs.	Lbs.	Million Gallons
Residential					
Energy-Wise Low Income	63	2,509	13.4	346	3.4
HVAC Replacement	1,120	44,783	238.8	6,171	60.7
New Construction	580	23,191	123.6	3,196	31.4
Consumer Products (CFL)	6,310	252,386	1,345.6	34,776	341.9
Total Residential	8,073	322,869	1,721.4	44,489	437.4
Non-Residential					
Large Existing	4,317	172,669	920.6	23,792	233.9
New Construction	1,107	44,277	236.1	6,101	60.0
Small Business	183	7,323	39.0	1,009	9.9
Building Operator Training	39	1,541	8.2	212	2.1
Energy Information Services	0	0	0	0	0
Schools	273	10,940	58.3	1,507	14.8
Total Non-Residential	5,919	236,750	1,262.2	32,621	320.7
Portfolio Plan Total	13,992	559,619	2,983.6	77,110	758.1

PORTFOLIO SPENDING 2005 – 2007

9. APS under-spent its budget for the period 2005 through 2007. The Company reported spending of just over \$33 million, roughly equivalent to the \$30 million amount it was authorized to collect from all customers in base rates over the same period. By spending at least \$30 million, APS avoided the requirement to “give back” any amount under \$30 million through a negative DSM adjustor rate. The amount of DSM spending under its original obligation of \$48 million for the three-year period (\$18 million) remains an APS obligation. APS has proposed fulfilling this remaining 2005 through 2007 obligation over the three years 2008 through 2010.

10. Table 3 is a summary of APS Portfolio Plan spending from 2005 through June 2008. The spending numbers have been aggregated from numbers reported in the Semi-Annual DSM Progress Reports submitted by APS to the Commission. The table includes a running 12-month spending column including the most current data available for the purpose of comparing historic 12-month spending to 12-month spending numbers proposed by APS for 2008 through 2010.

Table 3

APS DSM Portfolio Plan Total Spending (As Reported in Semi-Annual Progress Reports) 2005 - Current			
6-Month Reporting Period	6-Month Spending	Running 12-Month Spending	Cumulative Spending
January – June, 2005	\$953,501		
July – December, 2005	\$2,257,280	\$3,210,781	\$3,210,781
January – June, 2006	\$2,686,449	\$4,943,729	\$5,897,230
July – December, 2006	\$7,943,572	\$10,630,021	\$13,840,802
January – June, 2007	\$6,833,297	\$14,776,869	\$20,674,099
July – December, 2007	\$12,566,713	\$19,400,010	\$33,240,812*
January – June, 2008	\$11,627,390	\$24,194,103	\$44,868,202
<p>Note: Spending reported includes Measurement, Evaluation & Research expenses and Performance Incentive.</p> <p>* A slightly different 2005 – 2007 DSM spending number of \$33,237,361 was reported to the Commission by APS in its Demand Side Management Adjustor Clause (“DSMAC”) filing. APS attributes the difference to its handling of some customer credits associated with the EIS program which were included in the Semi-Annual DSM Progress Reports but did not get booked into the accounting system. APS is attempting to reconcile the discrepancy.</p>			

11. Staff has made some observations based on the data. For example, dividing the 2005 through 2007 cumulative spending presented in Table 3 (\$33,240,812) by the 2005 through 2007 MWh savings presented in Table 1 (3,253,598 MWh) results in a cost of \$10.22 per MWh or 1.02 cents per kWh. Staff believes these overall results are favorable and that energy-efficiency in this instance appears to be an economical “source” of electric energy. Similarly, dividing the 2005 through 2007 cumulative spending presented in Table 3 (\$33,240,812) by the 2005 through 2007 MW savings presented in Table 1 (64.27 MW) results in a cost of \$517,206 per MW. This capacity cost is about 7.5 percent higher than conventional and advanced gas combustion turbine technologies, but is considerably lower than most other generation options.

PROPOSED SPENDING AND BUDGET LEVELS 2008 - 2010

12. APS has proposed a budget that is consistent with its spending obligations established in the Settlement Agreement in Decision No. 67744, April 7, 2005, (“Settlement Agreement”) and with expanded obligations created in Decision No 69879, August 28, 2007. Under Decision No. 67744, APS is obligated to spend at least \$16 million per year on Commission-approved DSM programs. Included in the \$16 million annual spending obligation is

a \$10 million annual base rate DSM allowance for the costs of approved eligible DSM-related items and an obligation to spend on average at least an additional \$6 million annually on approved eligible DSM-related items to be recovered by means of the Company's DSM adjustment mechanism. Under Decision No. 69879, APS is obligated to spend an additional \$3.5 million annually for Rebates and Incentives for its Non-Residential Existing DSM program.

13. APS is proposing an average annual Portfolio Plan budget of \$25.5 million per year for the period 2008 through 2010. The proposed Portfolio plan annual budget total was derived by adding the spending obligation components shown in Table 4 below.

Table 4

APS DSM Portfolio Plan Annual Spending Obligation Components (Annual Spending for Period 2008-2010)	
Decision No. 67744, April 7, 2005 in Base Rates	\$ 10 million per year
Decision No. 67744, April 7, 2005 in DSM Adjustor Rate	\$ 6 million per year
Decision No. 69879, August 28, 2007 for NR Existing	\$ 3.5 million per year
Average Annual Under Spending for 2005 – 2007 (Make-up)	\$ 6 million per year
Total	\$25.5 million per year

14. It should be noted that APS' proposed Portfolio Plan budget for 2008 through 2010 is a top-down budget, based on allocation of this \$25.5 million annual spending obligation to the various DSM programs, activities, and budget categories. It should also be noted that APS has proposed an "average annual" budget for each of the three years 2008 through 2010, meaning that each budget for each of the three years is the same. Staff believes that most of the ramp-up of APS DSM activities has been accomplished, but expects to see additional growth over the period 2008 through 2010 as evidenced by the higher budget numbers.

15. Staff is not overly concerned with the flat three-year budget, but believes that APS' DSM Portfolio Plan spending obligations are for each year, not for a three-year budgeting period. APS' Portfolio Plan spending obligations arising from the Settlement Agreement and other Commission Decisions are ongoing obligations that continue until changed or terminated by the Commission. Such obligations do not expire or terminate at the end of any three-year budgeting period. In fact, the three-year budgeting period is merely a somewhat arbitrary grouping of years that has little significance other than as a convenient planning horizon.

1 16. Staff has reviewed the budget allocations to the various programs and to the various
2 budget categories within each program and finds them to be reasonable. Staff believes that the
3 level of the 2008 \$25.5 million Portfolio Plan proposed budget may be somewhat conservative
4 considering that annual spending for the "running 12 months spending" ended June 30, 2008, was
5 \$24.2 million as shown in Table 3. Staff believes, however, that the \$25.5 million is an annual
6 spending guideline and that APS may apply to spend over that amount on prudently incurred
7 Commission-approved DSM activities should the demand for DSM program participation create
8 the need to do so. APS should ensure that any such additional spending requested remains within
9 other specific budget caps and constraints placed on it by the Commission.

10 **PORTFOLIO PLAN GOALS**

11 17. APS states that its goals for the Portfolio Plan during 2008 through 2010 include
12 DSM spending of \$76.5 million (\$25.5 million per year), lifetime MWh energy savings of
13 6,814,000 MWh, demand savings of 109.9 MW, and net benefits of \$187 million.

14 18. Staff believes these goals are attainable and that the demand savings estimated by
15 APS may be somewhat conservative. Staff also believes that additional environmental benefits to
16 society will accrue from this level of DSM activities. Staff estimates the benefits from measures
17 installed over this three-year period to be a savings of 1) 29,300 lbs. of sulphur oxide (SOx), 2)
18 1,172,008 lbs. of nitrogen oxide (NOx), 3) 6,248.4 million lbs. of carbon dioxide (CO2), 4)
19 161,492 lbs. of particulate matter (PM10), and 5) 1,587.7 million gallons of water (H2O).

20 **DSM PROGRAMS AND ACTIVITIES**

21 19. APS is proposing the continuation of its portfolio of Residential programs and Non-
22 Residential programs ("NR programs") but with some modifications. The Company is not
23 proposing the addition of any new DSM programs, nor is it proposing the discontinuation of any of
24 its existing DSM programs. It is proposing certain procedural changes and modifications to some
25 of its programs as well as a stepped-up level of spending and participation.

26 ...

27 ...

28 ...

Residential Programs

20. APS' portfolio of ongoing Residential programs is described in the Company's application and are composed of the following:

1. Residential New Construction ("Residential New")
2. Residential Existing Heating, Ventilation, and Air Conditioning ("Residential HVAC")
3. Residential Consumer Products
4. Residential Energy Wise Low Income ("Energy Wise")

Non-Residential Programs

21. APS' portfolio of ongoing NR programs is described in the Company's application and are composed of the following:

1. Schools
2. Non-Residential Existing Facilities ("NR Existing")
3. Non-Residential New Construction and Major Renovation ("NR New")
4. Small Non-Residential ("NR Small")
5. Non-Residential Building Operator Training ("NR BOT")
6. Non-Residential Energy Information Services ("NR EIS")

APS PROPOSED PORTFOLIO PLAN FLEXIBILITY CHANGES***Allow APS to Shift up to 50 Percent of Funding Between Programs***

22. APS has requested a change to allow the Company to shift up to 50 percent of funding between programs within a sector, such as Residential or Non-Residential. Current restrictions on budget flexibility limit budget shifting to a maximum of 25 percent of budgeted funds from one program to another program in the same sector per calendar year. This restriction is in effect for budget shifting among all NR programs and for budget shifting among the Residential New program, the Residential HVAC program, and the Residential Consumer Products program. These restrictions were ordered in Commission Decision No. 68488, February 23, 2006, for NR programs and in Decision No. 68648, April 12, 2006, for Residential programs.

23. Staff performed a thorough analysis of budget flexibility in its review of APS' NR programs as discussed on page 38 of Attachment A to Decision No. 68488. This analysis resulted

1 in Staff recommendations to allow APS to shift a maximum of 25 percent of budgeted funds from
2 one program to another program in the same sector per calendar year, and the Commission
3 subsequently issued Orders adopting Staff's recommendations.

4 24. Staff is not aware of any situation where this policy has been a problem for APS.
5 APS has, in fact, made use of its ability to shift funds from one program to another program in the
6 same sector multiple times. In addition, on June 18, 2007, the Company filed an application
7 requesting additional Rebate and Incentive dollars for its NR Existing program. In Decision No.
8 69879, the Commission approved an additional \$3.5 million annually for the NR Existing program
9 Rebates and Incentives budget category. It appears to Staff that the 25 percent shifting authority is
10 sufficient for routine cases, and the Company has the ability to file an application with the
11 Commission to handle extraordinary cases. Staff believes that the procedure is working precisely
12 as it was intended to work, and that the Commission should retain oversight in the extraordinary
13 cases so that it can monitor and provide valuable input in such cases.

14 25. Staff does not believe that APS has made a convincing case for increasing the
15 percentage of funds that can be shifted from one program to another in the same sector.
16 Furthermore, by shifting 25 percent one year and 25 percent the following year, APS has the
17 ability to shift 50 percent of the funds from a program in two years; or 75 percent in three years; or
18 100 percent in four years. For the reasons discussed above, Staff has recommended that the
19 Commission deny approval for APS to increase budget shifting limitations from a maximum of 25
20 percent of budgeted funds from one DSM program to another DSM program in the same sector per
21 calendar year.

22 ***Allow APS to Set Financial Incentives Up to 100 Percent of Incremental Cost***

23 26. APS has requested a change to allow the Company to modify DSM financial
24 incentive payments to program participants up to 100 percent of incremental cost. Current
25 restrictions on budget flexibility limit incentives to a maximum of 75 percent of incremental cost,
26 and for certain measures, 50 percent of incremental cost. These restrictions are in effect for
27 limiting incentive levels for all NR programs and for the Residential New program, and the
28 Residential HVAC program. These restrictions were ordered by the Commission in Decision No.

68488, February 23, 2006, for NR programs and in Decision No. 68648, April 12, 2006, for the above mentioned Residential programs.

27. Again, these restrictions were recommended by Staff after a thorough analysis of budget flexibility in its review of the NR programs as discussed on page 38 of Attachment A to Decision No. 68488. The Commission subsequently issued Orders adopting Staff's recommendations.

28. Staff does not believe that APS has made a convincing case for blanket authority to modify incentives to as much as 100 percent of incremental cost. The only example offered by APS, where a higher incentive was cited as a possible solution to low participation, is the case of the NR Small program where the company is having difficulties reaching small business with its DSM programs. In the 13-Month NR DSM item (Docket No. E-01345A-05-0477), Staff has recommended the adoption of the Direct Install concept for the NR Small and Schools programs including a parallel recommendation for allowing financial incentive payments of up to 90 percent of incremental cost for Direct Install measures only. At the date of this writing, the initiative to adopt Direct Install and to increase the maximum incentive percentage of incremental cost for Direct Install measures only has not been acted upon by the Commission.

29. Staff believes that 1) because APS has not made a convincing case for blanket authority to change financial incentive payments to 100 percent of incremental cost; 2) because the only example cited in support of a need for such a change was in connection with the Direct Install initiative for small business; and 3) because the Direct Install issue along with the related increase in the incentive cap to 90 percent of incremental cost is being dealt with in another docket; Staff has recommended that the Commission deny blanket authority for APS to increase the cap on financial incentive payments without specific Commission approval, from current limits of 50 percent or 75 percent of incremental cost.

Allow APS to Change Minimum Efficiency Requirements to Qualify for an Incentive

30. APS has requested a modification to current policy that would allow the Company flexibility to change measure minimum efficiency requirements to qualify for an incentive without Commission approval. The Company cited the example of SEER and EER requirements on air-

1 conditioner and heat pump replacement programs as an example. The Company states that many
2 of its DSM program incentives are for equipment or services that are at the leading edge of energy-
3 efficiency technology and practice. APS further states that the nature of such products and
4 services is that they change relatively quickly. APS states that having flexibility to make such
5 requirement changes without formal Commission approval would allow APS to minimize the lost
6 opportunities that these types of issues present.

7 31. The Company also acknowledged that if given authority for any of the three
8 requested flexibility changes, there should be certain parameters that guide its flexibility
9 provisions. The parameters APS listed are 1) prior notification is provided to the Commission and
10 to the DSM Collaborative members, 2) cost-effectiveness is maintained as proven by APS Total
11 Resource Cost ("TRC") test results above 1.0, 3) the program's intent is not materially altered, 4)
12 funding is not shifted between Residential and Non-Residential sectors or out of Low Income or
13 Schools programs, and 5) funding shifts would not cause Planning and Administration costs to
14 exceed the caps set in Commission Orders which approved the programs.

15 32. One issue with APS' request for flexibility to change measure minimum efficiency
16 requirements without Commission approval lies in the cost-effectiveness issue outlined by APS in
17 2) above. Staff appreciates that APS would ensure cost-effectiveness by applying its TRC test, but
18 Staff is also required to establish cost-effectiveness for measures utilized in APS' DSM programs.
19 The Commission's 1991 Resource Planning Decision established the Societal Cost Test as the
20 methodology to be used by Staff for determining the cost-effectiveness of a DSM program.
21 Because different variables may be used by APS compared to those used by Staff, the results of
22 Staff's analysis could be, and often are, different from the results obtained by APS.

23 33. If the flexibility requested by APS to change measure minimum efficiency
24 requirements were to be adopted, Staff would not be afforded the opportunity to fulfill its
25 obligation to review measure cost-effectiveness before new efficiency requirements were placed
26 into service. This would be inconsistent with the Commission's 1991 Resource Planning
27 Decision. Under current procedures, APS must make an application to the Commission to change
28 ...

1 efficiency requirements which affords Staff an opportunity to review the application and to
2 perform necessary cost-effectiveness tests.

3 34. Staff does not believe that APS has made a convincing case for the Commission to
4 grant it flexibility to change measure minimum efficiency requirements without Commission
5 approval. Staff is also not aware of any situation where the current policy has been a problem for
6 APS. APS has, in fact, filed an application to change Residential HVAC program minimum EER
7 requirements, and requested the application be processed in an expedited manner. This application
8 was processed in a reasonable time by the Commission and certain problematic EER requirements
9 were changed. Using this procedure, Staff was able to perform its analysis, including the Societal
10 Cost Test on the measures, and APS was able to make needed adjustments to its measures within a
11 reasonable time.

12 35. Based on the discussion above, Staff has recommended the Commission deny APS
13 the authority to change measure minimum efficiency requirements for DSM program participants
14 to qualify for an incentive without first obtaining Commission approval.

15 **APS REQUESTS FOR CLARIFICATION**

16 36. APS is requesting clarification on two issues. First, the Company is requesting the
17 Commission confirm that the provision that Rebates and Incentives for the NR programs from
18 2005 through 2007 be capped at the current estimated level of 52 percent of the overall budget
19 expires at the end of 2007.

20 37. Secondly, the Company is requesting clarification that it can shift funding between
21 measures in the same program without notification to the Commission or approval from the
22 Commission.

23 38. Both issues were analyzed by Staff in the 13-Month NR DSM item (Docket No.
24 E-01345A-05-0477) currently awaiting an Open Meeting and Decision by the Commission. In the
25 Staff Report docketed on November 12, 2008, Staff has made recommendations regarding both of
26 these issues as they relate to NR programs.

27 39. Recommendation (3) on page 63 of that Staff Report states "Staff recommends that
28 the existing 52 percent limitation on combined Rebates and Incentives as a percentage of overall

1 non-residential spending in all existing Non-Residential programs be removed beginning in the
2 2008 budget year.”

3 40. Recommendation (9) on page 64 of that Staff Report states “Staff recommends that
4 APS be granted the authority to shift budgeted funds within a Commission-approved DSM
5 program, without obtaining Commission approval, either between budget categories within a DSM
6 program or between sub-programs, measures or measure groups within a DSM program; unless
7 such funding shifts would violate another budget-shifting parameter or limitation on budget
8 flexibility ordered by the Commission.”

9 41. Staff believes that a Commission decision on Recommendation 3 in the 13-Month
10 NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and Decision
11 by the Commission will respond to APS’ request for clarification because the 52 percent restriction
12 is in effect only for NR programs.

13 42. Staff believes that a Commission Decision on Recommendation (9) in the 13-
14 Month NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and
15 Decision by the Commission will respond to APS’ request for clarification for budget shifting
16 within its NR programs. Staff believes APS could require further clarification regarding
17 applicability of this to its Residential DSM programs. For this reason, Staff has recommended that
18 APS be granted the authority to shift budgeted funds within any Commission-approved Residential
19 DSM program, with the exception of the Energy-Wise Low Income Program, without obtaining
20 Commission approval; either between budget categories within a DSM program or between sub-
21 programs, measures, or measure groups within a DSM program; unless such funding shifts would
22 violate another budget-shifting parameter or limitation on budget flexibility ordered by the
23 Commission.

24 43. In order to achieve additional consistency between Residential and NR Portfolio
25 Plan programs, Staff has offered further recommendations to extend some additional DSM
26 program provisions recommended in the 13-Month NR DSM item (Docket No. E-01345A-05-
27 0477) to the Residential DSM programs.

28 ...

44. Staff has recommended that Planning and Administration costs for any given Residential program, with the exception of the Energy-Wise Low Income Program, not exceed 10 percent of the total program budget for the budgeting period, such as 2005 through 2007 or 2008 through 2010.

45. Staff has recommended that APS modify its Residential DSM Semi-Annual Progress Report sections to incorporate changes parallel to changes (if any) that may be approved by the Commission in the 13-Month Non-Residential DSM item (Docket No. E-01345A-05-0477) for Non-Residential DSM Semi-Annual Progress Report sections.

STAFF COST-EFFECTIVENESS ANALYSIS

46. As mentioned earlier, the Commission's 1991 Resource Planning Decision established the Societal Cost Test as the methodology to be used for determining the cost-effectiveness of a DSM program. Under the Societal Cost Test, in order to be cost-effective, the ratio of benefits to costs must be greater than one. That is, the incremental benefits to society of a program must exceed the incremental costs of having the program in place. Societal costs for a DSM program include the cost of the measure and the cost of implementing the program, excluding rebates. The societal benefits of a program include deferred or avoided generation capacity and energy costs. Other benefits of a program may include reduced water consumption and air emissions, although these benefits may not be monetized.

47. In its research in connection with the 13-Month NR DSM item (Docket No. E-01345A-05-0477) currently awaiting an Open Meeting and Decision by the Commission, Staff very recently performed its own cost-effectiveness studies on all APS existing and proposed new NR DSM measures using the Societal Cost Test. In its analysis of this Portfolio Plan filing, Staff performed its cost-effectiveness studies on all APS residential DSM measures.

48. Any measure demonstrating benefits exceeding its costs has a benefit/cost ratio of 1.0 or greater, and is considered to be cost-effective. Measures scoring slightly under 1.0 may be considered cost-effective based on the value of environmental benefits which are quantified but not assigned a dollar value and not reflected in the Societal Cost Test score.

...

1 49. All residential measures tested by Staff were found to be cost-effective with the
2 exception of the Residential HVAC program air-conditioning and heat pump replacement
3 measures. All five air-conditioner measures (SEER 14 through 18) and all five heat pump
4 measures (SEER 14 through 18) scored less than 0.60 on Staff's Societal Cost Tests. In its
5 analysis, Staff, for the first time, used energy (kWh) and peak demand (kW) savings numbers
6 actually measured in the field by APS' Measurement, Evaluation, and Research ("MER")
7 Contractor. These numbers were substantially lower than the "engineering" estimates used when
8 the Residential HVAC program was approved on April 12, 2006, in Decision No. 68648.
9 Additionally, the minimum efficiency standard from which savings are measured has changed
10 from 11 SEER to 13 SEER since cost-effectiveness was last evaluated for this program. Thus, the
11 savings measured from a base unit of 13 SEER to one of the energy-efficient SEER levels is
12 considerably less than it would have been if measured from a base of 11 SEER.

13 50. Staff is very concerned about the Residential HVAC air-conditioner and heat pump
14 cost-effectiveness results. Staff was told by APS that it also experienced unsatisfactory results
15 when it performed its Total Resource Cost ("TRC") tests for cost-effectiveness. Staff was made
16 aware of the issue at approximately the same time that APS sent its APS' Measurement,
17 Evaluation, & Research Final Report, dated September 30, 2008, and docketed on October 27,
18 2008.

19 51. Staff has discussed the situation at length with APS, and it was discussed in the
20 APS DSM Collaborative meeting on November 5, 2008, by participants from a variety of different
21 perspectives. A number of potential solutions have emerged from the discussion including
22 bundling the HVAC unit replacement measures with the quality install measure and possibly with
23 the repair and replace measure, both of which passed Staff's Societal Cost Test. APS is currently
24 evaluating Residential HVAC program modifications that would potentially return the program to
25 cost-effectiveness.

26 52. Staff believes that the continuation of a DSM program found to be less than cost-
27 effective is a serious problem that needs to be dealt with promptly. However, Staff also believes
28 that APS and other involved parties need to proceed carefully to either make real procedural

1 modifications to the program that will make it cost-effective or to terminate or replace the program
2 as soon as possible. Staff has recommended that APS file a plan in Docket Control by January 16,
3 2009, to 1) promptly implement modifications to the Residential HVAC program that will return
4 the program to cost-effectiveness, or 2) promptly replace the program with an alternate DSM
5 program to benefit Residential customers using funds allocated to the Residential HVAC program,
6 or 3) terminate the program as promptly as possible.

7 **ENERGY WISE LOW INCOME PROGRAM ISSUES**

8 53. In its application, APS requested an increase in start-up costs for the Tribal Low
9 Income Weatherization component of the Energy Wise program from 20 percent to 30 percent of
10 total program costs. APS subsequently requested that Staff dismiss that request when neither party
11 could determine the basis of the 20 percent limitation.

12 54. In its investigation of the issue, however, Staff became concerned whether APS and
13 its program delivery Community Action Agency ("CAA") partners are operating the Energy Wise
14 Low Income program in strict adherence to procedures established in Decision No. 68647, April
15 12, 2006. Staff believes that there could be some misunderstandings among the parties involved
16 with the delivery of services under this program, and believes it may be beneficial to simply
17 review operational procedures and expectations with APS to ensure that the Company is in
18 conformance with the Order.

19 55. Staff does not believe that its concerns about the Energy Wise program should
20 further delay Commission action on approval of APS' Portfolio Plan update. However, for the
21 reasons discussed above, Staff has recommended that APS conduct a thorough review of the
22 requirements of Decision No. 68647 and its Energy Wise Low Income program operations, and
23 schedule a presentation to Staff, by January 30, 2009, during which APS and Staff can discuss if
24 the Company is in strict adherence with the Order, and if not, establish corrective actions
25 necessary to bring the Company into strict adherence to the Order.

26 ...

27 ...

28 ...

STAFF PORTFOLIO PLAN UPDATE RECOMMENDATION

56. Staff has recommended that APS' Demand-Side Management Portfolio Plan Update 2008 through 2010 be approved with the modifications, additions, and requirements recommended herein.

CONCLUSIONS OF LAW

1. APS is certificated to provide electric service as a public service corporation in the state of Arizona.

2. The Commission has jurisdiction over APS and of the subject matter in this Application.

3. The Commission, having reviewed the application and Staff's Memorandum dated December 2, 2008, concludes that it is in the public interest to approve APS' Demand-Side Management Portfolio Plan Update 2008 through 2010 with certain modifications, additions, and requirements, as recommended by Staff.

ORDER

IT IS THEREFORE ORDERED that approval to increase budget shifting limitations, from a maximum of 25 percent of budgeted funds from one DSM program to another DSM program in the same sector per calendar year, is hereby denied.

IT IS FURTHER ORDERED that blanket authority for Arizona Public Service Company to increase the cap on financial incentive payments without specific Commission approval, from current limits of 50 percent or 75 percent of incremental cost.

IT IS FURTHER ORDERED that authority for Arizona Public Service Company to change measure minimum efficiency requirements for DSM program participants to qualify for an incentive, without first obtaining Commission approval, is hereby denied.

IT IS FURTHER ORDERED that Arizona Public Service Company is hereby granted authority to shift budgeted funds within any Commission-approved Residential DSM program, with the exception of the Energy-Wise Low Income Program, without obtaining Commission approval; either between budget categories within a DSM program or between sub-programs,

...

measures, or measure groups within a DSM program; unless such funding shifts would violate another budget-shifting parameter or limitation on budget flexibility ordered by the Commission.”

IT IS FURTHER ORDERED that that Planning and Administration costs for any given Residential program, with the exception of the Energy-Wise Low Income Program, shall not exceed 10 percent of the total program budget for any budgeting period, such as 2005 through 2007 or 2008 through 2010.

IT IS FURTHER ORDERED that Arizona Public Service Company shall modify its Residential DSM Semi-Annual Progress Report sections to incorporate changes parallel to changes (if any) that may be approved by the Commission in the 13-Month Non-Residential DSM item (Docket No. E-01345A-05-0477) for Non-Residential DSM Semi-Annual Progress Report sections.

IT IS FURTHER ORDERED that Arizona Public Service Company Shall file a plan in Docket Control by January 16, 2009, to 1) promptly implement modifications to the Residential HVAC program that will return the program to cost-effectiveness, or 2) promptly replace the program with an alternate DSM program to benefit Residential customers using funds allocated to the Residential HVAC program, or 3) terminate the program as promptly as possible.

IT IS FURTHER ORDERED that Arizona Public Service Company shall conduct a thorough review of the requirements of Decision No. 68647 and its Energy Wise Low Income program operations, and schedule a presentation to Staff, by January 30, 2009, during which APS and Staff can discuss if the Company is in strict adherence to the Order, and if not, establish corrective actions necessary to bring the Company into strict adherence to the Order.

...

...

...

...

...

...

IT IS FURTHER ORDERED that Arizona Public Service Company's Demand-Side Management Portfolio Plan Update 2008 through 2010 is hereby approved, with the modifications, additions, and requirements discussed herein.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN

COMMISSIONER

COMMISSIONER

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this _____ day of _____, 2008.

BRIAN C. McNEIL
EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

EGJ:JDA:lhmvJFW

1 SERVICE LIST FOR: Arizona Public Service Company
2 DOCKET NO. E-01345A-07-0712

3 Ms. Deborah R. Scott
4 Pinnacle West Capital Corporation
5 Post Office Box 53999, MS 8695
6 Phoenix, Arizona 85072-3999

7 Mr. Robert J. Metli
8 Snell & Wilmer L.L.P.
9 400 East Van Buren
10 Phoenix, Arizona 85004-2202

11 Mr. Daniel Pozefsky
12 Chief Counsel
13 Residential Utility Consumer Office
14 1110 West Washington Street, Suite 220
15 Phoenix, Arizona 85007

16 Mr. Jeff Schlegel
17 SWEEP
18 1167 West Samalayuca Drive
19 Tucson, Arizona 85704-3224

20 Mr. Ernest G. Johnson
21 Director, Utilities Division
22 Arizona Corporation Commission
23 1200 West Washington Street
24 Phoenix, Arizona 85007

25 Ms. Janice M. Alward
26 Chief Counsel, Legal Division
27 Arizona Corporation Commission
28 1200 West Washington Street
Phoenix, Arizona 85007